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Nota di contenuto	Introduction -- Stochastic synchronization of Markovian coupled neural networks with partially unknown transition rates -- Local synchronization of Markovian neutral-type complex networks with partially unknown transition rates -- Local Synchronization of Markovian nonlinearly coupled neural networks with generally uncertain transition rates -- Sampled-data synchronization of complex networks based on discontinuous Lyapunov-Krasovskii functional -- Sampled-data synchronization of Markovian coupled neural networks with time-varying mode delays -- Synchronization criteria of delayed inertial neural networks with generally uncertain transition rates -- Conclusions.
Sommario/riassunto	This monograph studies the synchronization control of Markovian complex neural networks with time-varying delays, and the structure of the book is summarized as follows. Chapter 1 introduces the system description and some background knowledges, and also addresses the motivations of this monograph. In Chapter 2, the stochastic synchronization issue of Markovian coupled neural networks with partially unknown transition rates and random coupling strengths is investigated. In Chapter 3, the local synchronization issue of Markovian neutral complex networks with partially information of transition rates is investigated. The new delay-dependent synchronization criteria in terms of LMIs are derived, which depends on the upper and lower

bounds of the delays. In Chapter 4, the local synchronization issue of Markovian nonlinear coupled neural networks with uncertain and partially unknown transition rates is investigated. The less conservative local synchronization criteria containing the bounds of delay and delay derivative are obtained based on the novel augmented Lyapunov-Krasovskii functional and a new integral inequality. In Chapter 5, the sampled-data synchronization issue of delayed complex networks with aperiodic sampling interval is investigated based on enhanced input delay approach, which makes full use of the upper bound of the variable sampling interval and the sawtooth structure information of varying input delay. In Chapter 6, the sampled-data synchronization issue of Markovian coupled neural networks with mode-dependent interval time-varying delays and aperiodic sampling intervals is investigated based on an enhanced input delay approach. Furthermore, the mode-dependent sampled-data controllers are proposed based on the delay dependent synchronization criteria. In Chapter 7, the synchronization issue of inertial neural networks with time-varying delays and generally Markovian jumping is investigated. In Chapter 8, we conclude the monograph by briefly summarizing the main theoretical findings.